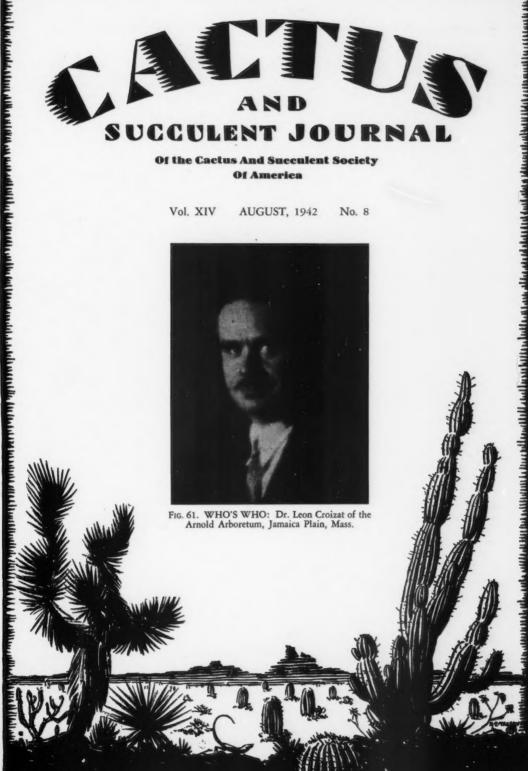
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Of the Cactus And Succulent Society Of America

AUGUST, 1942 Vol. XIV No. 8





CACTUS AND SUCCULENT JOURNAL

Published and Owned by the Cactus and Succulent Society of America, Inc., Box 101, Pasadena, California. A monthly magazine to promote the Society and devoted to Cacti and Succulents for the dissemination of knowledge and the recording of hitherto unpublished data in order that the culture and study of these particular plants may attain the popularity which is justly theirs. Subscription \$3.00 per year. Foreign \$3.00 per year by international money order. Membership in the Cactus Society free with subscription. Mail application to Scott Haselton, Editor, Box 101, Pasadena, Calif. Editorial Staff: The Entire Society. Entered as Second Class Matter at Pasadena, Calif., under act of March 3, 1879.

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EXPERIMENTERS

The next issue of the JOURNAL will contain the first pictures of the plants as shipped on July 1. If you have anything to report, please write now.

Now is the time to prepare your index file (pictures of the different plants will be mailed experimenters who are Society members). Study and record the history and habitat of each plant. Make additional cards on which to record various soil mixtures or cultural procedures. Don't depend on memory—make your

notes now as you go along.

The control set in California reports that the fruit of Opuntia monacantha has two or three roots 1½ inches long (grown in pure sand in a warm sheltered exposure getting direct sun only the last three hours of the day). Both green fruit and the fruit turning purple have rooted. The Cereopegia is rooted and has formed a half dozen heart-shaped leaves. Roots on the other plants have been reestablished in sand and are being potted in ½ leaf mold and ½ sand to which has been added a half spoon full of Vigero.

The Epiphyllum cutting and Euphorbia submammillaris are rooting nicely and one of the smallest offsets of Notocactus scopa var. ruberrima is about ready to send down a root (they say this is hard to root).

The plants are being protected from the burning sun and are kept on the "soft side" (green), rather than taking a chance in damaging the growing centers. Tepid water is being given them every other day; the sand dries out on top but is never fully dry at the roots. There have been no cold or dark days. Average daily temperature: high 90°, nights 65°F.

Do you agree with the theory of giving "Close and fresh air alternately?" What might be gained?

Do you water your plants with tepid water?

There are no definite rules for growing any individual cactus. Now is the chance to observe and learn. Do you find that your mature plants seem to have a second growing and flowering period—perhaps two "little summers"?

AMATEUR BULLETIN

Have you seen the Cactus and Succulent Bulletin? Hundreds have exclaimed, "We thought that the amateurs were forgotten and now the Bulletin is the answer to our prayers." One writer, in particular, reviews the articles that seemed most interesting to him.

"In the first issue Vol. I, No. 1, the planted succulent bowl is an inspiration with its natural colors and from it I could name a dozen of my plants. The accompanying article "Dish Gardens" should help amateurs and commercial growers in potted arrangements.

"The second issue shows a very popular succulent photographed by Haselton and calls attention to the details of this cactus-like succulent that all of us should grow. The rest of this issue is devoted to 'Potting Succulents for Fun' and continues with 'Mistakes and How to Avoid Them.' How you can put 25 illustrations in one issue of this dollar a year magazine is beyond me.

"The third issue starts the series of popular cacti and the Old Man Cactus is discussed from seedling form to maturity, ending with a travelogue in the home of this Mexican plant. The discussion on 'Common Names' and 'My Favorite Cactus' are packed with interest.

"The next issue follows through with the Orchid Cactus and tells how to grow and flower them. The column 'Cereusly Speaking' is a review of our own experiences and so entertainingly written. Mildred Orpet's article on 'Succulents' should make the growing of these plants hard to resist.

ing of these plants hard to resist.

"Issues 5 and 6 consist of a desert trip in which the writer seeks 'Fruits of the Desert' and introduces you to the Giant Cactus and the Organ Pipe. I think your illustrations of juvenile and mature plants are most helpful and make a valuable series which I understand you will follow through and will discuss all of the more common kinds.

"Please keep up this good work—it's the biggest dollar's worth of cactus enjoyment I have known."

Subscribe now and get all Bulletins to date. Send \$1.00 to Box 101, Pasadena, and you will receive all of the issues to date and to the end of the year.

WERDERMANN'S REPRINT

The September JOURNAL will contain the 4th and 5th installments of "Brasilien und Siene Saulenkakteen." Subscribers will receive this reprint free as part of the JOURNAL and its value will exceed the subscription cost. Keep up your membership ond don't miss a single issue.

ATTENTION A.E.F.

On your round trip to Tokio, as you pass through Australia be sure to contact: Mr. J. Cecil Johnston, 26 Ridgeway Ave., Kew, E. 4, Melbourne, Australia. Also Ralph W. Field, Tennyson via Prairie, Victoria, Australia.

Messrs. Johnston and Field collect cacti-enough said.

The Cactus and Succulent Society grieves the loss of two well known members: Howard O. Bullard of Hackensack, N. J., and Carl Hagenburger of Los Angeles.

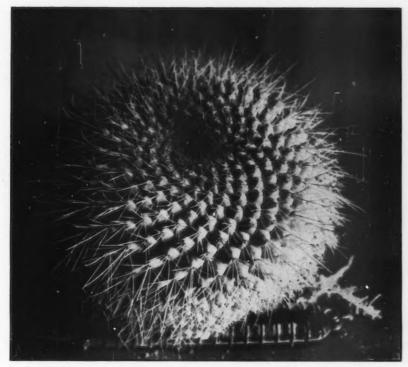


Fig. 62. Type specimen of Mammillaria Craigii sp. nov. x .6. Photo by George Lindsay.

A New Mammillaria Species

By GEORGE LINDSAY

Mammillaria Craigii sp. nov.

Corpus simplex, globosum; mamillae infra angulares, apicibus teretes, sucus lacteus; axillae lana alba sine setis; spinae centrales 1, 3 cm., rectae, fulvae, porrectae; spinae radiales 6-7, rectae, luridae; flores infundibuliformes; calycis partes exteriores magentae; stigmata 7 viridia olivacea; semina fusca.

Plant simple, flattened globular, apex slightly depressed, to 8 cm. tall and 15 cm. diameter; sap milky; tubercles pyramidal, in youth becoming rounded, to 15 mm. long and 13 mm. wide at base; axils bearing abundant wool, especially in flower producing area on shoulder of plant, bristles lacking; areoles oval, bearing slight cream felt in youth; central spine 1, acicular, porrect, smooth, enlarged base, golden with brownish tip, to 3 cm. long; radial spines 8, acicular, fairly erect, golden with brownish tip, to 2.5 cm. long; Flowers campanulate, appearing in March, opening as broadly as spines permit, usually about 20 mm. long and 15 mm.

wide; outer perianth segments approximately 15, to 10 mm. long and 2 mm. broad, lanceolate, reddish brown in color, tip obtuse, margin ciliate; inner perianth segments approximately 16 to 20, to 15 mm. long and 2 to 4 mm. broad, deep purplish pink with darker mid-line, tip obtuse, serrate; stamens numerous, 3 to 8 mm. long, cream to yellow; anthers minute, yellow; stigma lobes 7, 3 mm. long, greenish yellow; style 10 mm. long, yellow to pink near stigma lobes; Fruit—red, clavate, 8 by 12 mm. perianth persisting; Seeds light brown, curved pyriform, lateral linear hilum, faintly reticulate, glossy, 1 by 9.4 mm. Roots fiberous.

Type locality: Barranca del Rio Urinque, a few miles from Choro, in the Sierra Tarahumare, southwestern Chihuahua, Mexico.

Distribution: Known only from near the type locality, at an elevation of approximately 6,000 feet, southwestern Chihuahua, Mexico.

Type specimen collected by Robert T. Craig and George Lindsay, April 4, 1939, and deposited in the Dudley Herbarium of Stanford

University, number 283,191.

This is one of the most attractive cacti we encountered in Chihuahua. The type locality was the uppermost cliffs under the rim of the Barranca of the Rio Urinque, a gash cut thirty-five hundred or more feet deep into the Sierra Tarahumare. There the plants were fairly abundant, the golden discs seemingly plastered against the cliffs, their roots anchored in narrow crevices filled with leafmold. We had found very few cacti in the pine covered highlands, but upon dropping over the lip of the barranca found this species in quantity. I am happy to be able to name the species after its discoverer, Dr. Robert T. Craig, as slight recognition of his long, pains-taking, and unpublicised work with the Mam-

In an arroyo a mile or so from the collecting locality of Mammillaria Craigii we found a form which appeared to be different from that species. While darker in color and with some variation in spine count, color, etc., after all of the characters of both plants were broken down for analysis, the slight variations were thought not to be sufficient to use as a basis for even a varietal I believe, however, that the latter form should be mentioned. The aspect of the plant was darker, as the spines were brown. The plant body was very much the same, but the dark form appeared to have an extra radial spine, and occasionally two centrals instead of the typical one. The sap was more milky, and flowers were produced in a circle about the growing center, while those of the regular M. Craigii were produced more on the "shoulder" of the plant. The latter bore seven stigma lobes, the darker one

As is often the case within the Cactaceae, a series of collected plants will all vary somewhat in one or several characteristics. This is, of course, to be expected in "new" plant families, in which evolutionary changes are more apparent than in some of the better established or at least more stable plant groups. Species are man made tools of classification, and it is often a matter of the personal temperament, training, or idea of the individual that determines how he will use them in classifying a series of plants. The Mammillarias of the west coast of Mexico are variable in the extreme, and if comprehensive material of any one species were to be collected, and the two plants representing the widest variations from the type were alone examined, it would appear that two entirely seperate species were involved; if, however, all of the intermediate forms are considered, the true relationships of the plants can be seen, and it becomes apparent that all are variations allowable within a single species. For this reason one who has had opportunity to examine many specimens of a certain form in the field might reach conclusions concerning classification with which an-



Fig. 63. Type specimen of Mammillaria Craigii in flower, Desert Botanical Garden of Arizona. Photo by George Lindsay, April, 1940.

other, without that an advantage, would disagree. In the case of Mammillaria Craigii, the darker form might be described as a variety, but with our present limited knowledge of the plants, we feel it better to dismiss it with the above mention.

Collections of Mammillaria Craigii were made under a permit granted George Lindsay by the Departamento Forestal y de Caza y Pesca, Servicio de Pastos Hierbales y Arbustos Silvestres, number 224-9309, and signed March 6, 1939, by Rodolfo Sada Paz.



FIG. 64. Barranca del Rio Urinque, the type locality of Mammillaria Craigii sp. nov. is along the faces of the high cliffs in the right side of the photograph. George Lindsay photo.

AN INTERESTING SUCCULENT

From Southwest Cactus Growers Bulletin

(See Succulents for the Amateur, pg. 167.) This attractive Portulacaria afra belongs to the Portulacae or Purslane family, and is a close relative of the Portulaca. It is distinguished by its bright, glossy green, rounded leaves set in pairs along a thick, jointed maroon-red stem. This plant, known as the Elephant Bush because it ranks as a favorite food of the pachy-derms, grows to be a tree in South Africa, and blooms with pink attractive flowers. Because it is tender to frost it seldom grows large enough here in Southern California to flower. However, Mrs. Bakkers in San Diego has a specimen in her garden that blooms, she being in practically a frost proof area. This plant is easily grown from cuttings and is an asset to any col-lection whether a beginner or not. The plant takes little care and grows well in the ground.

SOUTHWEST CACTUS GROWERS OFFICERS

W. C. Runyan, President; Mrs. Maybelle Place, Vice-President; Mrs. Mamie Abercrombie, Secretary; Mr. Charles Place, Treasurer.

The two directors for the coming year will be Mr. John Akers for the two year period and Mr. Hubert Monmonier for the one year term.

IN U. S. A. SERVICE

Please advise us the names of all Society members who are in the Army, Navy, or Air Corps service. We want to record them in our magazine with all good wishes of their fellow members.

Euphorbias, unfortunately, except when cultivated in a large bed, cannot stand nematode. They are all too liable to it, and infested potted plants must be rerooted. L. C.

HAWORTHIAS

The March, 1935, JOURNAL contained an interesting review on Haworthias by W. T. Barker. A plate from "Nature Notes of South Africa" is well worth a re-reading. Or send to Box 101, Pasadena, Calif., for a copy—Price 50c.

To close out our odd numbers of JOURNAL, we offer for \$1.00, 6 issues (our selection) from any one volume (from III to X, inc.). You may choose your volume and we will select the issues. You may order 6 issues from each of the eight volumes for \$8.00. Odd issues (our selection) from volumes I and II,

4 for \$1.00. **BOX 101, PASADENA**

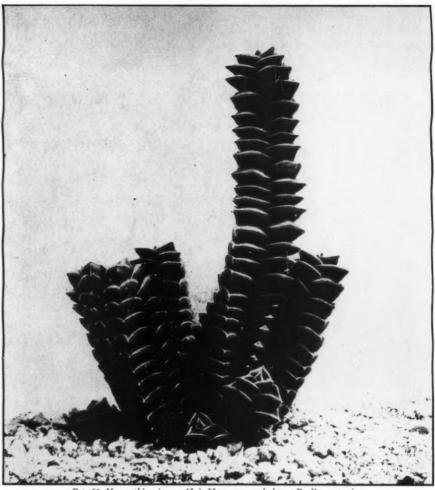


Fig. 65. Haworthia viscosa (L.) Haw. var. subobtusa Poelln. nat. size.

Notes on Haworthias

By J. R. BROWN

Haworthia viscosa (L.) Haw. var. subobtusa Poelln. in Repert. Sp. Nov. XLIV (1938) 240, in Desert Plt. Life XI (1939) 8, photo.

Leaves in 3 straight or somewhat spiral rows, subobtuse, spreading horizontally and with a very short point. The color of the leaf margins is reddish-brown, but this disappears in cultivated plants and is only evident when the plant is grown outdoors in the sun.

Locality: Aberdeen.

This is one of the most interesting forms of

Haw. viscosa due to its very compact habit and the very closely set leaves. The plant shown in the photo. has been grown under glass for many years. It differs from other forms of Haw. viscosa by its somewhat obtuse leaf tips, this is more noticeable in the older leaves and especially in plants grown outdoors. The leaves are almost the same length and width, in this plant the older leaves are 15 mm. long and 15 mm. wide. Usually, however, plants of Haw. viscosa var. subobtusa have somewhat narrower leafy stems and consequently smaller leaves.

New Combinations and Notes Under Echinofossulocactus Lawrence

By DR: LEON CROIZAT

As a follow-up to my article, "Echinofossulocactus or Stenocactus" (in Cact. Succ. Jour. Amer. 14:69. 1942), these new combinations are in order:

(1) Echinofossulocactus Boedekerianus (Berger) Croizat.

Echinocactus Boedekerianus Berger, Kakteen 246.

Stenocactus Boedekerianus Berger, loc. cit., 346

[nomen provisorium].

In a coming paper I will have occasion to discuss in detail Berger's devious handling of nomenclature. As pointed out, Stenocactus is treated by Berger as a *subgenus* (Untergattung), op. cit., viii, 244. However, Berger—probably to appropriate under his authorship combinations which he did not care openly to make-inserted, op. cit., 337, a line in the index (Sachregister) of his "Kakteen" to the effect that: "Die mit* versehenen Namen werden hier zum ersten Mal gennant" [The names with a * are here mentioned for the first time]. On p. 346 of this Index are seventeen binomials under Stenocactus marked with an asterisk, but-evidently on account of an oversight—the name Stenocactus itself is not so marked. Accordingly, Stenocactus is not "published" as a "genus" at all, despite the fact that seventeen "combinations" are effected under it. The Index Kewensis is in error, of course, in listing the publication of Stenocactus as a genus with reference to "Kakteen, 244 (1929)." I enter Stenocactus Boedekerianus in the synonymy of E. Boedekerianus as a provisional name (Art. 37 ter, Amsterdam Code), but doubt whether this name was actually published at all.

Berger's thoroughly misleading comments on the proper use of Echinofossulocactus and Stenocactus have been accepted by Backeberg & Knuth (Kaktus-ABC, 353. 1935); Borg (Cacti, 227. 1937); Bravo (Cact. Mexico, 394, 1937) and Marshall & Bock (Cactaceae, 146. 1941).

(1) Echinofosculocactus tetraxyphus (Schumann) Croizat.

Echinocactus tetraxyphus Otto in Schumann, Gesamtb. Kakt. 363-364, Fig. 63. 1899; Berger, Kakteen 244. 1929.

Stenocactus tetraxyphus Berger, loc. cit., 346 [no-

men provisorium].

This species is treated by Britton & Rose (Cactaceae 3:112. 1922) as a synonym of E. heteracanthus (Muehlenpf.) Britt. & Rose, from which Berger (op. cit., 247, Fig. 70) and other authors (e.g., Bravo, op. cit., 403) separate it. (3) Echinofossulocactus Lexarzai Croizat sp.

Subglobosus, ad 10 cm. altus, totidem fere latus. Costis 40-50, subundulatis, sat gracilibus; aculeis 8-10, patentibus, valde appressis, intertextis, 8-13 mm. longis, albicantibus: centralibus 4, quorum uno supremo applanto, striato, ad 6.5 cm. longo. Floribus 3 cm. longis: perianthii laciniis linearibus, abrupte acuminatis, roseatis vel albicantibus, dorso linea purpurea notatis.

Typus [quoad elucet]: Fig. 208, sub Stenocacto, cum descriptione, (Bravo, Cact. Mexico, 401, 1937).

Stenocactus Lexarzai described by Bravo, loc. cit., without a Latin diagnosis is not validly published (Art. 38. Amsterdam Code), and I cannot honor the authorship of Bravo in any legitimate manner (Art. 48), because Stenocactus itself is illegitimate. The specific epithet designated by Bravo is here maintained under my own authorship, the publication of the new species being validly effected only on the date of release from the press of the Latin diagnosis given above. I am not aware that a type-sheet has been preserved, and designate as typic (Art. 18) the illustration and description of Bravo.

(4) Echinofossulocactus Bustamantei Croizat sp. nov.

Globosus, ad 10 cm. latus. Costis ad 35; aculeis radialibus 8-9, patentibus, intertextis, albicantibus: centralibus 3, supremo latissimo, 3-5 cm. longo, applanato, caeteris quam radialibus paulo majoribus, apice nigricantibus. Floribus 2-2.5 cm. longis; perianthii laciniis latis, acuminatis, versicoloribus, obscuris albo-marginatis aut pallidis per medium striatis.

Typus [quoad elucet]: Fg. 210, sub Stenocacto, cum scriptione (Bravo, Cact. Mexico, 403-404. 1937). The same observations apply to this species which concern E. Laxarzai.

(5) Echinofossulocactus Vaupelianus (Werdermann) Croizat.

Echinocactus Vaupelianus Werdermann in Notizbl. Bot. Gart. Berlin 11: 273. 1931. Stenocactus Vaupelianus Knuth

enocactus Vaupelianus Knuth in Backeberg & Knuth, Kaktus ABC, 355. 1935.

This species is omitted by Bravo in her account of Echinofossulocactus (Stenocactus) in Mexico.

Echinofossulocactus Ochoterenaus (Tiegel) Schmoll is to be corrected to read E. Ochoterenianus, as Ochoterenaus, derived from the name Ochoterena is a "clearly unintentional orthographic error" (Art. 70), which cannot stand. Tiegel's publication of Stenocactus Ochoterenaus (in Moell. Gartn. Zeit. 48: 397-398 fig. 1933)

is valid even without a Latin diagnosis, this being required (Art. 38) only from January 1st,

Borg states (Cacti, 227. 1937): "Recently the following new species from the same region [Mexico] have been described under the generic name of Echinofossulocactus, and are now offered by dealers for cultivation, viz.: E. bravoiae Tiegel. E. carneus Tiegel. E. densispinus Tiegel. E. ochoterenaus Tiegel. E. rectispinus Tiegel. E. sphacelatus Tiegel. E. rosasianus Bravo." These names do not appear either in the Index Kewensis or in the Gray Index, with the exception of E. Ochoterenaus, which is well known. They are listed, however, by Whitmore in his account of the San Fernando Society's Second Annual Show (in Journ. Cact. Succ. Soc. Amer. 5: 589. 1934) among the noteworthy plants of the Benedict collection. They again appear, with beautiful photographs of Mr. F. Schmoll, in an article by Mrs. Caroline Schmoll, published in the same periodical (op. cit., 6: 36-37 figs. 1934). These mentions, hints and illustrations do not constitute valid publication under the International Rules of Nomenclature, with the possible exception of E. rectospinus (not rectispinus) which Mrs. Schmoll says has a dark, almost carmine flower with many varieties, this being perhaps a justification for holding this binomial as a nomen subnudum rather than as a nomen nudum. It is also worthy of notice that Mrs. Schmoll speaks of "E. gladiatus var. carneus," thereby reducing to variety an unpublished name.

Since it is necessary to have a regular record of these names, the following is in order:

Echinofossulocactus Bravoae Whitm. nomen nudum, in Jour. Cact. Succ. Soc. Amer. 5: 589. 1934.

Echinofossulocactus carneus Whitm. nomen nudum, in op. cit., 590.

Echinofossulocactus gladiatus Lawr. var. carneus C. Schmoll nomen subnudum, in op. cit., 6: 36-37, fig., 1934.

Echinofossulocactus rectospinus Whitm. nomen nudum, in op. cit., 590; C. Schmoll nomen subnudum, in op. cit., 6:36. 1934.

Echinofossulocacius sfacelatus Whitm. nomen nudum, in op. cit., 590; C. Schmoll, in op. cit., 6: 37 fig., 1934.

Echinofossulocactus rosasianus Whitm. nomen nudum, in op. cit., 590; C. Schmoll, in op. cit., 6: 37 fig., 1934.

The authorship of Tiegel, accepted by Borg, is illegitimate, as it appears in print, so far as I know, later than that of Whitmore.

Interesting data on the history of these names were kindly furnished by Mr. Schmoll, whom I

wrote a few days ago. With his wonted courtesy and keen willingness to help furthering our knowledge of cacti, Mr. Schmoll informed me that about ten years ago the first plants were sent to Tiegel, in Germany, who published only one species, E. Ochoterenianus, being prevented by death from going on in his work. Other plants were later sent as a gift to Dr. Houghton when he began to gather material to write a booklet on Stenocactus. Doctor Houghton informed Mr. Schmoll that it would take him years to decide the proper status of these plants, and he, too, died too soon to finish the work. Still more plants, about 60 to 80, reached the hand of another author who meant to publish a book on the Cactaceae, and did, but he, too, took no record of them. It is altogether likely, Mr. Schmoll tells me, that some of these plants are exterminated in their original range because the grounds on which they grew are now under cultivation.

It would be highly desirable that collectors who have in their possession the plants of Mr. Schmoll, and can trace their names with some certainty to the source, turn these plants in blossom and fruit to some competent botanist for study and publication. To judge from the photographs, not all of them are *Echinofossulocactus*, some suggesting *Echinomastus*, which is one of the most difficult groups of Cactaceae to interpret. As things stand, the record is glutted with unwelcome *nomina nuda*, which increase the confusion already surrounding *Echinofossulocactus*.

NOTE: It may be recorded as an oddity that Orcutt (Cactography 5. 1926) [1] changes Echinofossulo-cactus into Efossus, because "There is an unwritten law against the use of names of undue length." It may well be true that the unwritten law exists which Orcutt claims, but the written law (Art. 59, Amsterdam Code) does not support Orcutt's contention, and this finally seals the case against him. No author is to forget the fact that his own opinions may be good, but have no power against existing regulations to the contrary. Comments like Orcutt's are properly met with the colloquial: "Tell it to the judge . . ." Botany is a democracy, and the Rules that are have the sacredness of the will of the majority embodied into suitable prohibitions and prescriptions. It is the duty of those who write down these Rules to see to it that they are clearly and precisely worded, and it is the duty of the individual botanist to obey them, discussing them in a fitting form when they prove to be ambiguous, inade-quate or erroneous. If everybody makes his own laws, and reads into the Rules what the Rules do not state, taxonomic work ceases being a scientific pursuit merely to become a bedlam of strife and uncertainty.

None of the combinations effected by Orcutt under Efossus are involved in the synonymy of the species

here considered.

⁽¹⁾ Orcutt's contributions on Cactaceae offer knotty problems of bibliography. His "Cactography" will be reprinted in this JOURNAL accompanied with discussions by the author of this article.



Fig. 66. The uncommon Bryophyllum Gastonis Bonnieri is a beautiful plant growing against a wall of lava rock in Mrs. Moir's garden. Note the many plantlets at the leaf tips.

Garden in Kauai, T. H.

March, 1942.

DEAR EDITOR:

The past year has marked a milestone in the garden during which time we converted another acre of volcanic rock land into our succulent garden. We are beginning to see the end—to visualize the finished work of our endeavors. The tree Cerei are taller and heavier; the Aloes more clustered; the in-between Cactus and Cereus

are doing their share to help the picture; the smaller Echinopsis and Mammillarias are forming their colonies, and the ground covers—the Stapelias, Sedums, Crassulas, Kleinias, Graptopetalums have filled in and given color around the rocks, thus setting off the individualities of the more distinctive plants.

The Kalanchoes and Bryophyllums have taken a place in my heart that would be hard to re-



Fig. 67. (Above) Acanthocereus pentagonus thrives in Hawaii. This flashlight picture shows 50 flowers on one plant. The flowers are pure white with pale yellow stamens. Fig. 68. (Below) Selenicereus pteranthus at home clambering over the rock wall. Sanseverias, shown on the right, thrive outdoors the year around.

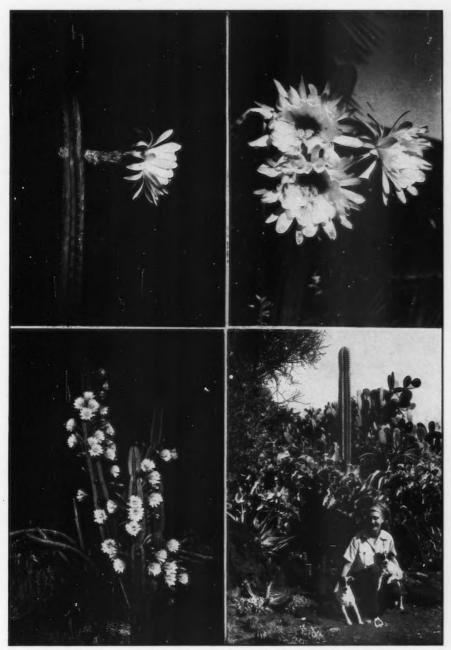


Fig. 69-70. Two top pictures show views of a well acclimated *Trichocereus pachanoi* from Ecuador. Fig. 71. (Lower left) A 15-foot *Cereus hexagonus* with 65 flowers attracts visitors to the author's garden. Fig. 72. (Lower right) Mrs. Moir, who has built an enviable collection in her tropical garden on the island of Kauai, T.H.

place with any other living thing in the plant world. Their spectacular leaves, such as those of Kalanchoe beharensis; their leaf clusters, like K. Fedtschenkoi, and K. marmorata; and all their fascinating flowers which can be used in the house all year around. We have about a dozen species.

Hoodia Gordoni has been in flower since last April. H. macrantha has just come in and they cause endless delight to all who see them. The

blossoms look like stenciled suede.

All of our Nightblooming Cereus were marvelous in this dry year we have just had. They flowered months longer than usual. We had flashlight tours regularly, so all could enjoy them. Trichocereus pachanoi flowered for the first time since we got it as a seedling nine years ago. The blossoms measured 14 inches across and were pure white with a crême de menthe green throat, and pale yellow stamens. They started opening at 5 p. m. and lasted till noon the next day.

Aloe spinosissima is blooming for the first time since we got it in 1935. A real treat.

I received my copy of "Cactaceae" and have eent happy hours, "blacked-out," poring over spent happy hours, it. The gentlemen who compiled and illustrated it are to be congratulated. I do love a book that

Hawaii is as beautiful as when you saw it and we love the spot for being so. We were in the 5th floor of the old Young Hotel in Honolulu on the now famous 7th of December. We had a ringside seat. What a spectacular show! We didn't believe it was real until we saw a Japanese plane go by our hotel window, hotly pursued by one of our boys, machine-guns barking as it went by. We could see the red rising sun on the fuselage of the first plane. The reports and items in the papers, etc., covered it very well. Secretary Knox was absolutely right. Aloha,

MRS. HECTOR MOIR.

FROM AUSTRALIA

-"as your boys and materials came pouring into Australia there was a wonderful relief to all and the people of Australia took the U. S. soldiers to their hearts. I think the feeling is mutual. I hope that some cactus enthusiasts will hunt me up.

As to sharing seeds to Australian Society members, I can send out about 12 packets to those requesting them, but they must go to non-professional growers.

Enclose self addressed envelope and please describe your collection.

RALPH W. FIELD

Tennyson via Prairie, Victoria.

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PART VIII August in Ohio

August 1. The birthday of the Midwest Cactus and Succulent Society. On this date in 1936, our society began to take form. Personal letters and Helen Grant Wilson's (Cleveland Plain Dealer Garden Editor) notice in "Horticulture Hall Happenings" bore fruit. Twenty folks interested in forming a club attended a get-together dinner in the dining room of the Exposition Horticulture Hall. When we adjourned to the lecture room we met 32 others, non-banqueters, but curious. I welcomed them, or tried to above the din from the adjoining kitchen and the continuous rumble of feet of those viewing our exhibit above us. I was elected temporary chairman and we decided to hold our organization meeting the last Sunday in August (which we did, and I was then elected first president of the organization). Ah, gregarious human beings. We held our seventy-second consecutive meeting July 19, just two weeks ago here at our house. Epiphyllanthus obovatus, rare relative of the Zygocactus and Schlum-

bergera growing on Selenicereus pteranthus stalk.
August 3. Thelocactus bicolor in glazed pot budded. Is an experiment by the way. Has had no drainage and plenty of water. The one in the clay pot, good drainage, bloomed June 4. Rhipsalis grandiflora has nine new growth centers—it takes patience and faith in some cuttings for several years before the plant shows any size at all-was a six-in, rooted cut when I bought any size at all—was a shall, louted tut which I bought it in June, 1936. In 1936, I broadcast over WHK for 15 minutes. My first radio experience. I talked about our exhibit and the interesting people we met in our "round-up." Broadcasting is "simple" as our four-year-old Nancy says. Particularly when Miss Olive Darling, the executive secretary of the Cleveland Garden Center advises and instructs each speaker in the fine points of radio speaking. I noted too, in my diary that examination of the exhibited plants after the first week in artificial light, peat moss covered pots, and little water, no ill effects were evident. Succulents showed some etiolation but that was to be expected.

August 7. Sanseveria subpicta in bloom. Leaves are short and broad with a brownish red edge. Blooms on the year old stems. That new one, a hybrid by Hahn brothers, is very attractive. Short stubby leaves like subpicta with zylonica markings. I observe this date in 1941 that my Stapelias and Huernias in strong light are not blooming as profusely as those shaded by other succulents. I usually hang them close to the glass during the winter in full light. S. grandistora, bella, and nobilis bloomed before April 15, (South African fall).

Nature, or my treatment? I do not know.

August 10. Leuchtenbergia principis whose stalk is 10 inches in diameter shows new growth in the center. If the bloom is no more attractive than the plant—now what AM I saying? Why—that is rank betrayal from a cactophile. All cacti are beautiful! Pelecyphora aselliformis has definite rows of "wood tick" spines all over the top. This plant is perched on top of the soil. Sandy says, "the poor thing." But I am not doing anything-its too finicky to be tampered with. Rhipsalis cassutha is covered with white berries, "mistletoecactus" indeed. In 1936, packed up my plants, awards, purchases, and trades. After two weeks exhibiting, my plants needed a recuperating period. No damage that light, air, and water, couldn't remedy, however.

August 11. One and three-fourths inches of rain fell n a half hour. Wind hit around 48 miles an hour. Plants in pots under grape-arbor bowled over, but none damaged. Expected to shovel sand back in beds, but my fears were groundless. Plants were well drained, so they were merely washed clean. Lithops pesudotruncatella and Comptonii suffered this indignity, too.

August 15. Stapelia variegata and Echidnopsis cerei-formis in bloom. Huernia Schneideriana budded. In 1940, we were in Cincinnati. Visited the Zoo. Saw the "cussed" rattlers that are supposed to live with the "cussed" Opuntias. Went to the famous Rookwood pottery, but no cacti or succulents enhanced the beauty of the exquisite museum pieces. Then on to the Eden Park Conservatory and saw that exhibit of cacti and succulents which would do honor to any world collection. (E. J. Fish, local cactophile, here two weeks ago, had just returned from Cincinnati and said that those Aloes you KIO's have are 100% perfect. Congratulations. After seeing Belle Isle in Detroit, Michigan; the Cactus House in Rochester, N. Y.; the Rose Collection in the Smithsonian Institute in Washington, D. C.; and the Shaw Gardens in St. Louis—having seen all these, I marvel at the restraint of the initial carvers in Cincinnati! Visited the Coles again. Our R. V. P. is using treated tin cans for pots as directed in the JOURNAL. Plants look in good health. Had hardy Opuntias from southern Ohio, Indiana and Kentucky. Gave me cuttings from the long stemmed variety which is unwrinkled and has fewer spicules and long spines than O. compressa of these parts. Oren Casey calls it O. rasinesque.

August 18. After keeping a record of buds and blooms on all my plants since 1934, was I chagrined when I found that Epithelantha micromeris had not only budded but bloomed and set seed before I noticed it. How easily that little button cactus "saboteured" my boast that I never missed a bud. Had to dispossess two lace wings (genus Chrysopa) from the new stems of my Epiphyllums. They had counted on providing their offspring, the impudent things, with this dainty as I found the light green eggs like good sized corsage pins stuck to the edge of the stems.

August 22. Trichocereus lamprochlorus has three offsets. Such a pretty waxy green plant that I am yery offsets. Such a pretty waxy green plant that I am very partial to it. Crassula cultrata is more of a novelty than a specimen plant. Cleistocactus Baumanii has four blooms and at least 20 buds. "Scarlet Bugler" is

not a misnomer.

not a misnomer.

August 26. Euphorbia obesa, my "bachelor" Euphorbia has developed into a very pretty plant. The radiating ribs with all over checked pattern attracts the eye whenever anyone looks at my collection. Is now five inches tall and eight inches in diameter. Frank Hinckley of Cleveland wants one like it. Euphorbias: caducifolia, nivulia, and royleana have their leaves; caducifolia, two feet high, has 6 to 8-inch leaves while royleana, 18 inches high, has 5 to 6-inch leaves while two plants, according to my records, are from India. Eugene Ziegler imported the seeds and I bought the plants when they were three inches high. Euphorbia Barnardii, a five-armed 10-inch plant in my collection, is a rare item according to authorities I have read.

August 28. Cool, 46 degrees when I arose at 5:30 a. m. Rhipsalis houlletiana budded for the second time. Bloomed in March. Rhipsalis teres and Pelargonium echinatum growing rapidly. Both plants from the col-

lection of Henry Poth in Mansfield. Must consider withholding water so plants will ripen and be ready for winter

August 31 Jottings as They Appear in My Nine Year Diary

1934. My cousin here described a "cactus" so well I recognized it as Stapelia variegata. Blooms profusely

for him. Can't say as much for my own plant.

1935. Went to Bergen Swamp (New York) veritable storehouse of all types of swamp plants. We we looking for wild orchids and were not disappointed. Visiting Gene Ziegler. His cactus seedlings are a joy to behold.

1936. Grafted Oreocereus Trollii on a Selenicereus pteranthus. My one regret is always that I have to cut

a stalk.

1937. Fifth setispinus bloom this season as much of marvel to me as the first one that I mentioned (Part I, 1931). Poindexter's catalogue came. Oh, would I could have them all. Everyone he has listed sounds interesting. Record of blooms in 1934 were 22, in 1935 were 17, in 1936 were 13, and 6 to date this year. Still striving to make some of them bloom that I see in these catalogues.

1938. In Detroit, Michigan, Hylocereus undatus at Belle Isle had 22 buds which looked like monsteria delicosa fruit 15 feet above me. Conservatory is open at night and I had to leave at 4 p. m.. (I still watch my plant for buds. Dr. Machwart had one bloom last year [1941]. Saw Carment's Kodachrome picture of

1939. At the E. S. Burke Estate in Chagrin Falls, saw Wm. Fische's collection there. Professor and Mrs. Lynds Jones, of Oberlin College, were with Sandy and me. Professor Jones wandered about the estate studying birds and rare trees. Never been much of a hand for cactus. As he says, smiling, "One in a family is enough." He recalls that students did not sleep very well if they spread their blankets over one when he took them on College Ecology trips. But the cut-tings Mrs. Jones and I brought back with us all grew.

1940. Started to Spencerport to see Violet and Gene Ziegler. Drove 310 miles in 7 hours. (Not repeated in 1942—Leon Henderson, please note.) Looked over collection and decided upon new plants and a few to replace dead or disfigured plants in my own collection.

1941. 92 degrees with humidity high. Mixed up an experimental batch of soil. Used powdered iron ore, bone meal, clay and the usual ingredients—old plaster, humus, sand, and gravel. Potted two Heliocereus speciosus rooted cuttings, Monvillea phannosperma, Hylocereus trigonus, Pereskias bleo, sacharosa, and bahiensis. (Note: Plants did not respond at first but now, 1942, the growth is luscious green and disease free). 46 different species of cacti have bloomed so far this year.

1942. Up to August 1, 54 different species of cacti have bloomed this year. Thus endeth the eighth lesson. J. E. R.

EUPHORBIA SEEDS

Mr. G. A. Frick announces that he received hundreds of requests for free Euphorbia seeds. Many of the letters contained questions. It was a physical impossibility to answer so many letters and he offers his apology. The supply of seeds is exhausted.

DEALERS—COLLECTORS

Are you interested in cooperating with a National Collection Competition with plant prizes. Here is a chance to meet collectors and stimulate interest in collections. There is a definite need to encourage more collections. Write to your Editor.



Fig. 73. THE HENRY SHAW CACTUS SOCIETY OF ST. LOUIS

Front Row: (Left to right) Miss Virginia Segar, Mr. Henze, Ladislaus Cutak, and Mr. Ned Dare. Back Row: (Left to right) Mrs. Niermann, Mr. Niermann, Mr. A. Lorenz, Mr. Jos. Holmes, Mrs. Lux Bock, Mr. George Lux Bock, Mr. C. J. Briner and Mr. Vander Heyden.

THE HENRY SHAW CACTUS CLUB

By LADISLAUS CUTAK

It had to happen. There was no other way out. During the first Cactus Convention in St. Louis, I promised to organize a cactus club in this Missouri metropolis and now after a full year, the promise has at last been fulfilled. The club would have been started long ago, but the whole blame rests with me. My time has been so well taken up with various duties that I kept putting off the society until the thought began haunting me.

Realizing that I was doing an injustice to cactus lovers in our district, I called the first meeting for Sunday afternoon, July 12, at the Missouri Botanical Garden. Cards were sent out only two days in advance of the meeting and some of the enthusiasts were contacted on the phone. When the appointed time arrived, twelve members appeared on the scene. Many more would have been present but for various reasons. I learned later that some did not reveive their cards until the following week, others had en-

gagements which could not very easily be broken off, and Gus Bantel, grower for the Sieloff Floral Company (so well known to the Convention visitors) only a few hours before had boarded a plane for a California vacation. By the time the second meeting rolls around, which will be August 9th, our membership will be doubled.

The twelve disciples of the cactus cult met in the historic "Museum and Library" building which was erected by Henry Shaw in 1859 and used during his lifetime as a museum and for housing their herbarium and library. Convention visitors will recall this old mellowed building where our ex-President Bill Marshall called the first Conference to order on July 4, 1941. Of particular interest to many was the gayly decorated ceiling depicting the fauna and flora of the world, the original frescoes executed under the direction of Henry Shaw himself.

The first order of business was a terse discussion on the need of a cactus club in the St. Louis area. When all agreed that such an organization was essential, each member pledged to promote the cause, and then a motion was set for a name by which the new organization should be known. Mr. C. J. Briner proposed The Henry Shaw Cactus Society of St. Louis' and this name was unanimously adopted, It is most fitting that we honor Henry Shaw, the philanthropic founder of the Missouri Botanical Garden, where the first important botanical cactus collection was established in the United States. Since no society can function without officers, the next order of business called for the appointment of leaders and I was asked to accept the presidency of the organization and appoint such persons who in my estimation would best serve the society. I accepted the office but pro-posed that the officers serve pro tem for the duration of this year, when a general election should take place by the ballot system. A complete roster of our officers will be presented to the JOURNAL readers in a forthcoming issue. Many issues were proposed and discussed but it was decided not to pass on them, but rather to introduce them at the next meeting, when a larger representation of members would be on hand. When better organized, our society intends to issue some form of a monthly cactus paper to be distributed among its members. It is hoped that the other affiliated cactus clubs will offer their news bulletins in exchange. After adjournment, the twelve members paid a visit to the Cactus House where a group picture was taken.

Just a word or two before I sign off. As you

Just a word or two before I sign off. As you know I was appointed Regional Vice President for District 4a, embracing the states of Iowa, Missouri, Arkansas, and part of Illinois. It is my duty to help cactus lovers of this district in whatever problems may arise in connection with following the cactus hobby. My deputies (designated in the May JOURNAL) and I are at your service and we have pledged to solve your problems or to answer any questions you have in mind. Please make use of this service.

Oklahoma City Cactus and Succulent Window Gardens

By LONA EATON MILLER

Winter gardening is as important as summer gardening to Oklahoma City cactus and succulent collectors, and is often accomplished in window gardens. It serves two purposes—wintering tender plants, and satisfying a longing (experienced by good gardeners) to feel plants and to see them growing.

Jay E. Gilkey, 1625 Northwest 29th Street, enjoys window gardening in west windows. In the garden he winters about 60 plants, most of which are succulents. Some of the 26 families are Faucaria, Lithops, Adromischus, Hoodia, Taveresia, Stapelia, Echeveria, Huernia, Aprica, Opunia, Mammillaria, Cepbalocereus, Lophophora, and Astrophytum.

Mr. Gilkey is a lover of the unusual in nature, and

is ever striving to add to his collection "that something" that is out of the ordinary. He thinks the value of studying cacti and succulents is an educational one, because the collector becomes acquainted with plants from all over the world. Since many of the best botanists claim cactus flowers to be among the most beautiful of all blooms, the student has the opportunity to appraise from the viewpoint of color, form and texture, some of nature's finest flowers. It also has the advantage of being a very restful hobby. Mr. Gilkey has won sixty-five ribbons with his plants in city flower shows during the nine years he has pursued his favorite hobby.

Over a period of five years Mrs. Jas. H. Hyde, 122 Northeast 11th Street, has collected about 25 families of cacti and succulents. The collection is not a scientific one, hecause if one member of a genera appeals to Mrs. Hyde she gets it, but does not move heaven and earth to have every other member of that genus. However, she does have more than one species of many generabut each one must arouse her interest. She is particularly fond of Cereus peruvianus and it has bloomed for three successive years. She also likes Atanhoured bentagonus since it is such a consistent bloomer, blooming at intervals all the season, over a period of years. She grows Notocatus for their lovely spine coloring as well as for beautiful blooms. Representatives from the genus Lophophora and Astrophytum are grown for their unusual form. The heavy spined Coryphanthas, Opuntias, and Pediocactus come in for their share of the collector's attention.

The smaller varieties of Euphorbias, Aloes, Crassulas, Kalanchoes, and Haworthias form an interesting group and lend themselves to window kardening as do Stapelias and Echeverias. There are about 50 plants growing in the window garden, which provides a warm home for plants, many that are native to the southern hemisphere, and that do their growing during Oklahoma's winter season. Seventy-five ribbons, won in city flower shows are testimonials of Mrs. Hyde's enthusiasm for her pet pursuit.

Using her favorite color blue, as a predominating hue to highlight the cheery note of colorful containers,

Using her favorite color blue, as a predominating hue to highlight the cheery note of colorful containers, Miss Cleta Stubblefield, 612 Northeast Ninth Street, has achieved an artistic window garden. Her hobby for four years has been collecting cactus and succulent plants. Some of the families represented in the collection are Echinopsis, Cepbalocereus, Kalanchoe, Dudieya, Aloe, Haworthia, Echeveria, Chamaecereus, Mammillaria, and Echinofossulocactus.

Mrs. Jesse Vandenburgh, 1640 West Park, found that when one loves to grow plants, and collects a large number it isn't long until the problem of housing them must be solved. She advises building a large bay window on the house. She did, and for four years has been developing a large window garden. Shelves are on the south, east and west windows. About 40 succulents and 80 cacti winter there. The tiny containers are of unusual designs and shapes, like a pepper, a swan, a gourd or a duck. They are in hues of orange, yellow, light green, dark red, blue, dark blue, and orange, and add a gay note to the garden. In front of the window and a definite part of the project are two metal trays fitted with boxes. One holds a fine succulent garden, the other contains cacti. The latter has a miniature house and tiny cactus garden of its own, with an ingenious planting of cacti on either side of a wisp of a road.

Winter and window gardening are practically synonymous as far as Oklahoma City cacti and succulent collectors are concerned, if a conservatory is not available to winter the plants in. The four described are only a few of the successful window gardens that may be seen flourishing against a window background.

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